Electronic Version
Stylesheet Version v1.1.1

Angular And Linear Flexure Plate Accelerometer

Abstract

An accelerometer system includes a rigid plate system coupled to an inertial platform. A first flexure plate defines a first flex axis and is adjacent to the rigid plate system a first distance from the spin axis. The first flexure plate generates a first frequency signal in response to acceleration of the first flexure plate. A second flexure plate defines a second flex axis and is adjacent to the rigid plate system a second distance from the spin axis. The second flexure plate generates a second frequency signal in response to acceleration of the second flexure plate. A controller including receives the first frequency signal and the second frequency signal and generates an angular acceleration signal from a difference of the first frequency signal and the second frequency signal. The controller also generates a linear acceleration signal in response to an average of the first frequency signal and the second frequency signal. The controller also controls a missile system in response to the first frequency signal and the second frequency signal.